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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,466	03/27/2001	Sean Lee	099866/9	1836

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EXAMINER

SHEIKH, HUMERA N

ART UNIT PAPER NUMBER

1615

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/818,466

Applicant(s)

LEE ET AL.

Examiner

Humera N. Sheikh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 135-170 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 135-170 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### **Status of the Application**

Receipt of Applicant's Arguments/Remarks, Response and the request for extension of time (3 months-granted), all filed 03/09/05 is acknowledged.

The 35 U.S.C. §102(e) rejection of claims 135-138 and 153-156 over LaTorre *et al.* (US Pat. No. 6,517,863 B1) has been withdrawn.

Claims 135-170 are pending. Claims 135-170 stand rejected.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 135-138 and 153-156 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaTorre *et al.* (US Pat. No. 6,517,863 B1).**

LaTorre *et al.* teach compositions and methods for treating nails and adjacent tissues comprising particles of bioactive glass that have anti-microbial properties, alone or in combination with therapeutic agents, hydrophilic polymers and other additional agents (see Abstract).

According to LaTorre *et al.*, the bioactive glass composition can be prepared in several ways to provide melt-derived glass, sol-gel derived glass, and sintered glass particles (col. 4, lines 33-45). The bioactive glass has a particle size of less than about 5 microns and can be in the form of a suspension, lotion, cream (water-in-oil emulsion), gel or extract (col. 4, lines 27-32; 51-67).

LaTorre *et al.* disclose that the bioactive glass compositions can include additional components, such as antibiotics, antivirals, antifungals, biotin, collagen, amino acids, proteins, vitamins, penetration enhancers, permeation/binding agents, dyes, fragrances and other cosmetically useful additives (col. 2, lines 62-66). Bioactive glass also has anti-microbial properties (col. 2, line 67).

The Examples at columns 6-7 demonstrate various bioactive glass formulations for application to a nail surface. For instance, Example 1 at column 6, line 45 demonstrates a bioactive glass preparation whereby 0.2 grams of Bioglass® with a particle size of less than 20 microns was mixed with an equal volume of water to form a paste. The paste was applied to the nails of one hand and allowed to dry. This procedure was repeated and after two applications of

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the Bioglass® powder, there was a discernable difference in the strength and hardness of the nails treated with the Bioglass® powder, compared to the untreated control.

**Claims 139-152 and 157-170 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaTorre *et al.* (US Pat. No. 6,517,863 B1) as applied to claims 135-138 and 153-156 above and further in view of Vatter *et al.* (US Pat. No. 6,224,888 B1).**

The teachings of LaTorre *et al.* have been discussed above. LaTorre *et al.* do not teach cosmetic additives, such as jojoba oil, glycerin, parabens and pigments. It is obvious to one of ordinary skill in the cosmetic art to include additives, such as oils, waxes, pigments and the like. Such skill is also evident from the reference of Vatter *et al.*

Vatter *et al.* teach cosmetic compositions comprising various additives, such as oils, waxes, pigments, preservatives, colorants, fragrances and the like. Suitable oils include *jojoba oil, mineral oil, castor oil, etc.* (see reference column 6, lines 19-35). Waxes include *carnauba, candelilla, ozokerite, microcrystalline waxes and mixtures thereof* (col. 8, lines 31-44). *Pigments, dyes and talc* are disclosed at column 10, line 64-col. 11, line 49. Vitamins taught include *Vitamin A and E* (col. 12, lines 20-29). *Glycerine* is disclosed at column 5, lines 8-13. Parabens, such as *methyl paraben and propyl paraben* are disclosed in various examples, particularly Example 14. Vatter *et al.* teach that the cosmetic compositions can be, for instance, in the form of foundations, eye shadows, blushers, lipstick, lipcare products, mascara, solutions, powders and the like (col. 2, lines 16-21); (col. 12, lines 2-35).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the combined reference teachings of Vatter *et al.* within LaTorre *et al.* to obtain improved personal care compositions containing an array of beneficial additives because Vatter *et al.* expressly teach cosmetic compositions comprising routinely utilized additives, such as oils, waxes, pigments, vitamins, preservatives and the like for skin, hair and nails and similarly, LaTorre *et al.* teach a cosmetic composition for treating nails and adjacent tissues. The expected result would be an enhanced, beneficial cosmetic composition.

In summary, there is no significant distinction observed between the instant invention and the prior art, since the prior art explicitly teaches cosmetic formulations comprising bioactive glass and further teaches that it is well-known to use cosmetically-formulated additives and ingredients in a variety of make-up products. Thus, the instant invention as a whole would have been obvious to one of ordinary skill in the art at the time of the invention. Hence, the instant invention is rendered *prima facie* obvious over the cited art of record.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Pat. No. 4,814,165      Berg *et al.*      03/1989

### ***Response to Arguments***

Applicant's arguments filed 03/09/05 have been fully considered.

Firstly, Applicant argued regarding the 35 U.S.C. §102(e) rejection over LaTorre *et al.* (US '863) stating, "Claims 135-138 and 153-156 are not anticipated by LaTorre. The present

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invention works (1) using substantially anhydrous cosmetic formulations; (2) does not require the presence of additional anti-microbial agents; and (3) provides a long duration of effectiveness. Applicant's arguments were found persuasive with regards to the anticipation rejection. Accordingly, the 35 U.S.C. §102(e) rejection of claims 135-138 and 153-156 over LaTorre et al. has been withdrawn.

Secondly, Applicant argued in regards to the 35 U.S.C. §103(a) rejection of claims 135-138 and 153-156 over LaTorre et al. stating, "LaTorre cannot render obvious claims 135-138 and 153-156 for the same reason since the (1) 'substantially anhydrous' element is not disclosed. (2) LaTorre also concedes the need for additional anti-microbial additives to provide a significant antimicrobial effect, whereas the instant invention does not require the presence of additional anti-microbial agents; and (3) the present invention provides a long duration of effectiveness.

Applicants' arguments have been fully considered, but were not found persuasive. Regarding argument (1), it is the position of the Examiner that there is no criticality in the use of 'substantially anhydrous' claimed by Applicant since the prior art provides for the same formulations with the same purpose (cosmetic/personal care products) as desired by Applicants. It is noted that in use Applicant permits the bioactive glass to be combined with anhydrous and hydrous cosmetic ingredients (see pg. 25, 1<sup>st</sup> ¶ of instant specification). Furthermore, no criticality is observed in the 'substantially anhydrous' cosmetic claimed since Applicant's Acne prevention and treatment products and facial cleansing formulations permit the presence of water (see pgs. 54-55 of instant specification). Also note Example 10 on pg. 62 of the specification, which permits the use of 59.9% water. Applicant's exemplary methods of making at page 133 of the specification permit aqueous and non-aqueous liquid formulations. For these reasons, there

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are no unexpected and/or unusual results that accrue from Applicant's claim recitation of 'substantially anhydrous'.

Regarding argument (2), Applicant argues 'LaTorre also concedes the need for additional anti-microbial additives to provide a significant antimicrobial effect, whereas the instant invention does not require the presence of additional anti-microbial agents'.

This argument has been considered, but was not persuasive. The instant 'comprising' claim language permits the presence of additional components or ingredients besides from those instantly recited in the claims. Therefore, Applicant's argument of additional antimicrobials in LaTorre was not persuasive.

Regarding argument (3), Applicant argues that 'the present invention provides a long duration of effectiveness. LaTorre does not disclose stable cosmetic compositions (or methods of making such compositions) comprising bioactive glass and a substantially anhydrous cosmetic formulation.'

Applicant's argument has been considered, but was not persuasive. The prior art provides for cosmetics that function effectively to yield durable bioactive glass cosmetic formulations, as similarly desired by Applicants. Moreover, the prior art cosmetic formulations evidence that the silver, copper or zinc ions are not detrimental to cosmetic products. There are no unexpected results imparted from the exclusion of these ions in the cosmetic composition.

Lastly, Applicant argued regarding the 35 U.S.C. 103(a) rejection of claims 139-152 and 157-170 over LaTorre *et al.* (US '863) further in view of Vatter *et al.* (US 6,224,888 B1) stating, "The Examiner has not provided explanation for how or why a person of ordinary skill in the art



would be motivated to combine LaTorre with Vatter to arrive at the present invention. Vatter does not cure the deficiencies of LaTorre.”

Applicant's argument has been considered but was not found persuasive. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, LaTorre teach compositions and methods for treating nails and adjacent tissues comprising particles of bioactive glass that have anti-microbial properties, alone or in combination with therapeutic agents, hydrophilic polymers and other additional agents (see Abstract). The bioactive glass composition can be prepared in several ways to provide melt-derived glass, sol-gel derived glass, and sintered glass particles (col. 4, lines 33-45). LaTorre et al. do not teach cosmetic additives, such as jojoba oil, glycerin, parabens and pigments. Vatter is relied upon and sufficiently remedies the deficiency of LaTorre et al. by teaching cosmetic compositions comprising various additives, such as oils, waxes, pigments, preservatives, colorants, fragrances and the like. (see reference column 6, lines 19-35). Ample motivation is provided by the prior art of Vatter et al. to incorporate these additives, as Vatter et al. expressly teach that the additives are suitable for use in the cosmetics of their formulation to provide for additional beneficial effects and properties to their cosmetic products. One of ordinary skill in the art desiring additional cosmetic effects and properties would look towards the teachings of Vatter et al. to

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obtain optimally enhanced cosmetic products, based on Vatter's teachings. Thus, the instant invention when taken as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

### **Correspondence**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Humera N. Sheikh whose telephone number is (571) 272-0604. The examiner can normally be reached on Monday through Friday from 8:00A.M. to 5:30P.M., alternate Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page, can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

H. N. Sheikh



Patent Examiner

Art Unit 1615

May 31, 2005

THURMAN K. PAGE  
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